

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended): A device for supplying electrical energy to a sensor which is at a high electrical voltage in painting systems, the device comprising:

a light source which is at a low electrical potential substantially equal to, in particular the earth's electrical potential;

a light receiver in which a converter converting light energy into electrical energy is provided, which is electrically connected to the sensor and is at the high potential of the sensor; and,

an optical waveguide which connects the light source to the light receiver. [[;]]

2. (previously presented): The device of Claim 1, wherein the converter is a solar cell.

3. (previously presented): The device of Claim 1, wherein the optical waveguide is formed by a bundle of optical fibres.

4. (previously presented): The device of Claim 3, wherein the light receiver has a housing in which is a transparent plate, into which the ends of the fibres of the optical waveguide are fed, is arranged in the vicinity of a side wall, all the internal surfaces of the housing which the light emerging from the transparent plate can reach being provided with a reflective layer.

5. (previously presented): The device of Claim 4 wherein the transparent plate is a plastic plate.

6. (previously presented): The device of Claim 5, wherein the reflective layer consists of aluminum foil.

7. (previously presented): The device of Claim 1, wherein the light receiver contains a converging lens by which the light emerging from the end face of the optical waveguide is essentially collimated and thus guided onto the converter.

8. (previously presented): The device of Claim 1 further comprising an accumulator which is constantly charged by the voltage being generated by the converter.

9. (currently amended): The device of Claim 2[[+]], wherein the optical waveguide is formed by a bundle of optical fibres.

10. (previously presented): The device of Claim 9, wherein the light receiver has a housing in which is a transparent plate, into which the ends of the fibres of the optical waveguide are fed, is arranged in the vicinity of a side wall, all the internal surfaces of the housing which the light emerging from the transparent plate can reach being provided with a reflective layer.
11. (previously presented): The device of Claim 10 wherein the transparent plate is a plastic plate.
12. (previously presented): The device of Claim 11, wherein the reflective layer consists of aluminum foil.
13. (previously presented): The device of Claim 4, wherein the reflective layer consists of aluminum foil.
14. (previously presented): The device of Claim 2, wherein the light receiver contains a converging lens by which the light emerging from the end face of the optical waveguide is essentially collimated and thus guided onto the converter.
15. (previously presented): The device of Claim 3, wherein the light receiver contains a converging lens by which the light emerging from the end face of the optical waveguide is essentially collimated and thus guided onto the converter.
16. (previously presented): The device of Claim 9, wherein the light receiver contains a converging lens by which the light emerging from the end face of the optical waveguide is essentially collimated and thus guided onto the converter.
17. (previously presented): The device of Claim 2 further comprising an accumulator which is constantly charged by the voltage being generated by the converter.
18. (previously presented): The device of Claim 3 further comprising an accumulator which is constantly charged by the voltage being generated by the converter.
19. (previously presented): device of Claim 4 further comprising an accumulator which is constantly charged by the voltage being generated by the converter.
20. (previously presented): The device of Claim 6 further comprising an accumulator which is constantly charged by the voltage being generated by the converter.